

REMARKS

The Office Action dated October 21, 2004 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 4, 13, 20, 21, 27, and 28 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claim 26 has been cancelled without prejudice. No new matter has been added and no new issues are raised which require further consideration or search. Claims 1-25 and 27-29 are currently pending in the application and are respectfully submitted for consideration.

In the Office Action, claims 1-29 were rejected under 35 U.S.C. §102(e) as being anticipated by Tello (U.S. Patent No. 6,463,537). The rejection is respectfully traversed for the following reasons.

Claim 1, upon which claims 2-12 are dependent, recites an apparatus for enabling functionality of a component. The apparatus includes an identification module having an identification number stored therein, a hash function module in communication with the identification module, a host in communication with the identification module, a guess register in communication with the host, an encryption module in communication with the guess register, and a public key module in communication with the encryption module wherein the public key module has a public key stored therein. The apparatus

also includes a comparator in communication with the encryption module and the hash function module, such that the comparator may compare a first bit string to a second bit string to generate a function enable output. The host is configured to communicate with a manufacturer to request a guess passcode corresponding to the identification number stored in the identification module.

Claim 13, upon which claims 14-19 are dependent, recites a component for selectively enabling functionality of an electronic device. The component includes a means for generating an encrypted bit string, a means for acquiring a guess passcode from a manufacturer, a hash function module in communication with an on board memory that has a predefined identification number stored therein, a means for determining if the encrypted bit string matches the guess passcode, and a means for outputting a functionality enable signal.

Claim 20, upon which claims 21-25 and 27-29 are dependent, recites a method for enabling functionality of an electronic component. The method includes the steps of encrypting a first bit string and a second bit string to generate a third bit string, calculating a fourth bit string, comparing the fourth bit string to the third bit string, and generating a function enable signal in accordance with the comparison. The encrypting step further comprises the step of determining a guess passcode, which includes the step of requesting the guess passcode from a manufacturer.

The prior art has failed to produce enablement methods that are effective against reasonably sophisticated attackers. The claimed invention resolves the limitations of the

prior art by providing, in one example, a cryptographic method wherein the secure portions of the method are implemented in electronic or computer products. More specifically, embodiments of the claimed invention implement cryptographic functions for enabling functionality of electronic/computer related components, wherein the relevant secure key related information is contained within computer hardware in a non-volatile memory device and not within a purely software driven configuration. The claimed invention also provides the ability to conduct secure functionality enablement on electronic/computer related components, wherein a public key for enabling the component is contained onboard and utilized in conjunction with a randomly generated component identifier in order to selectively enable additional functionality of the component.

As will be discussed below, the cited prior art reference of Tello fails to disclose or suggest the elements of the claims, and therefore fails to provide the advantages and features discussed above.

Tello discloses a modified computer motherboard security and identification system. More specifically, Tello discloses a modified motherboard with a microprocessor based security engine, enabling and disabling circuits, memory buffer circuits, modified BIOS, modified DDL, and a smart card reader and smart cards. Upon startup of the computer, the modified BIOS takes control and allows the security engine microprocessor to look for and read from a smart card in the smart card reader that is connected to the security engine microprocessor. A unique hash number is placed in the

smart card during the initial set up of the security system and a complimentary hash number is assigned to the security engine memory. During startup, a software program in the flash memory of the security engine compares the hash numbers in the smart card and the computer. If these two hash numbers are compliments, the boot up procedure is allowed to continue and access to the computer is allowed.

Applicants respectfully submit that Tello fails to disclose or suggest a host in communication with an identification module and that the host is configured to communicate with a manufacturer to request a guess passcode corresponding to the identification number stored in the identification module, as recited in claim 1. One of the functions of the host in the claimed invention is to determine the identification number associated with the component/network switch through communication with the nonvolatile memory via the interface. Once the host determines the identification number, it then contacts the manufacturer to receive the passcode for the component which the user wishes to enable (Specification, Page 11, lines 5-12).

Tello, on the other hand, only discloses a security engine microprocessor with a secret identification number stored in its flash memory (Tello, Column 9, lines 20-24). Furthermore, Tello fails to disclose or suggest a host which requests and receives a guess passcode from the manufacturer. Tello merely discloses that the security engine microprocessor “compares the personal information parameter provided in the header and the identification number with the same parameter field and identification number field written from the security engine flash memory” (Tello, Column 38, lines 11-15).

Nowhere does Tello disclose or suggest a host configured to communicate with a manufacturer to request a guess passcode corresponding to the identification number stored in the identification module. Therefore, Tello fails to disclose or suggest all of the elements of claim 1.

It is also respectfully submitted that claims 2-12 are dependent upon claim 1 and therefore should be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

Claim 13 recites the limitation “a means for acquiring a guess passcode from a manufacturer.” As discussed above in reference to claim 1, Tello fails to disclose or suggest requesting and obtaining a guess passcode from a manufacturer. In contrast to the claimed invention, Tello discloses that a secret identification number is stored in memory during its manufacture. The guess passcode recited in the current claims, on the other hand, is transmitted by the manufacturer or other authorized party when the user desires to enable additional functions (Specification, Page 10, lines 13-17). Therefore, the guess passcode is not comparable to an identification number stored in the flash memory of the microprocessor. This is an important improvement over the prior art because it prevents sophisticated hackers from obtaining the passcode since it is not stored in the memory. As a result, Tello fails to disclose or suggest all of the elements of claim 13.

It is respectfully submitted that claims 14-19 depend from claim 13 and therefore should be allowed for at least their dependence on claim 13, and for the specific limitations recited therein.

With respect to claim 20, Applicants respectfully submit that Tello fails to disclose or suggest requesting a guess passcode from the manufacturer. As discussed above, Tello only discloses that a secret identification number is stored in memory during its manufacture. Therefore, Tello fails to disclose or suggest all of the elements of claim 20.

It is respectfully submitted that claims 21-25 and 27-29 depend from claim 20 and therefore should be allowed for at least their dependence on claim 20, and for the specific limitations recited therein.

As mentioned previously, the Official Action took the position that the claimed invention was anticipated by Tello. Applicants respectfully submit that Tello fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-25 and 27-29 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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